

REMARKS/ARGUMENTS

A. Rejection of Claims 8 and 10 Under 35 U.S.C. § 112, ¶1

Claims 8 and 10 were rejected under 35 U.S.C. § 112, ¶1. Applicant respectfully traverses the rejection. Both claims 8 and 10 are original claims of the patent application and as such constitute sufficient written description. Thus claims 8 and 10 are patentable under 35 U.S.C. § 112, ¶1. See *In re Wertheim*, 191 USPQ 90, 97 (CCPA 1976).

B. Rejection of Claims Under 35 U.S.C. § 112, ¶2

Claims 1-11 and 26-28 stand rejected under 35 U.S.C. § 112, second paragraph as being indefinite. Applicant respectfully traverses the rejection. Claim 1 particularly points out and distinctly claims the subject matter, as the recited controller is adapted to indicate a position of a first end and an opposite end of a user-input device and cause one or more pixels to activate based on the indicated position of at least the first end.

This claim recitation is clear, as it clearly recites that the controller indicates two positions, and uses at least one to activate one or more pixels of a display. Thus claim 1 and claims 2-11 depending therefrom are patentable under § 112, second paragraph.

As to claims 26-28, the Office Action appears to state that the term "sensor" in claim 26 is "repugnant to the usual meaning of that term." Office Action, p. 4. Applicant respectfully disagrees, as the Specification states that sensors "may be transmitters, receivers or transceivers, in one embodiment." Specification, p. 7.

Such a definition is consistent with the usual meaning of the term sensor. As defined in *Merriam-Webster's Collegiate Dictionary, Tenth Edition* (1993), a sensor is "a device that responds to a physical stimulus (as heat, light, sound, pressure, magnetism, or a particular motion) and transmits a resulting impulse (as for measurement or operating a control)." Exhibit A, p. 1066. Thus the rejection of claims 26-28 are overcome.

C. Rejection of Claims Under 35 U.S.C. § 103

Claim 26 stands rejected under 35 U.S.C. §103 over U.S. Patent No. 6,028,595 (Shiga) in view of U.S. Patent No. 4,777,329 (Mallicoat). Applicant respectfully traverses the rejection. With respect to Shiga, there is no teaching or suggestion therein for a controller in a user-input device to receive signals from sensors on a display device, or to transmit position information, nor to cause one or more pixels of a display device to activate based on information transmitted from the user-input device.

Nor does Mallicoat teach or suggest causing one or more pixels of a display device to activate based on transmitted information, nor a controller that transmits information to a processor-based system regarding position of the user-input device. Instead, only an electromagnetic wave signal is sent back to a base unit from the user-input device. Thus there is no controller in the user-input device of Mallicoat to transmit information regarding a position of the device.

Further, there is no motivation to combine Shiga with Mallicoat. Shiga is directed to correcting position errors between a touch screen display and a pointing pen, in which the pointing pen sends photo signals to the touch screen display. In contrast, Mallicoat relates to a graphic input system in

which signals are transmitted from a base unit to a mobile element, and subsequent transmission of an electromagnetic signal from the mobile element back to the base unit, which is then used to determine position of the mobile element--not in the user-input device. There is no teaching or suggestion in either reference to combine the references to obtain claim 26. This is especially so, as neither reference discloses a controller in the user-input device, and certainly not such a controller to perform the claimed functions.

Claims 12-18, 24, 25, 27 and 28 stand rejected under §103 over Shiga and Mallicoat and further in view of U.S. Patent No. 6,184,873 (Ward). Applicant respectfully traverses the rejection. With respect to claims 12 and 17, the Office Action concedes that Shiga does not determine, in a user-input device, a position of the user-input device. For the same reasons discussed above, neither does Mallicoat. For at least this reason, the rejection of the above claims is overcome.

Furthermore, Ward does not teach or suggest determining a distance of first and second ends of a user-input device relative to a display in the user-input device itself. In this regard, as noted by the Office Action, the multiple sensors of Ward are output elements. Office Action, p. 5. Nowhere does Ward teach or suggest that such output signals are detected in the pen, and processed therein for a determination of the distance between the first and second ends of the pen relative to a display device. For this further reason, claims 12-18, 24, 25, 27 and 28 are patentable over the proposed combination.

Claims 31 and 33-37 stand rejected under § 103(a) over U.S. Patent No. 5,646,650 (Miller) in view of U.S. Patent No. 5,767,843 (Wagner). With respect to claim 31 neither Wagner nor Miller teaches or suggests a control unit to cause air to be generated in response to an activation of an activatable

element. In this regard, the portion of Wagner cited by the Office Action (see Office Action, page 6) nowhere teaches or suggests that such a control unit is present. Rather, an input lever of the device of Wagner simulates an airbrush. See, e.g., Wagner, col. 4, lns. 15-18. Thus claims 31 and 33-37 are patentable over the proposed combination.

Dependent claim 35 is further patentable as neither Miller nor Wagner teaches or suggests a processor to cause a light to be emitted from a digital airbrush. Dependent claim 36 is further patentable as, conceded by the Office Action, neither Miller nor Wagner teach or suggest a processor to generate one or more sounds in response to selection of an activatable element.

Claims 1-11 stand rejected under § 103(a) over Wagner in view of Ward and Shiga. Applicant respectfully traverses the rejection. With respect to claim 1, neither Wagner nor Ward nor Shiga teach or suggest a controller within a user-input device to indicate a position of a first and an opposite end of the user-input device. Thus for at least this reason claim 1 and claims 2-11 depending therefrom are patentable over the proposed combination.

Claims 19 and 20 stand rejected under § 103(a) over Shiga, Mallicoat, and Ward and further in view of U.S. Patent No. 6,104,387 (Chery). As discussed above, claim 17 is patentable over Shiga, Mallicoat, and Ward. Thus, none of the cited references teach or suggest an article containing instructions to determine the position of first and second ends of a user-input device in the user-input device. For at least this reason, claims 19 and 20 are patentable over the proposed combination.


Claims 21-23 stand rejected under § 103(a) over Shiga, Mallicoat, and Ward and further in view of Wagner. For the same

reasons discussed above with regard to claim 17, the combination of Shiga, Mallicoat, and Ward does not teach or suggest claim 17 from which claims 21-23 depend. Claims 21-23 are further patentable, as the addition of Wagner does not teach or suggest instructions to determine a position of first and second ends of a user-input device in the user-input device. For at least these reasons claims 21-23 are patentable over the proposed combination.

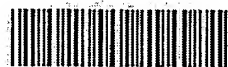
In view of these remarks, the application is now in condition for allowance and the Examiner's prompt action in accordance therewith is respectfully requested. The Commissioner is authorized to charge any additional fees or credit any overpayment to Deposit Account No. 20-1504.

Respectfully submitted,

Date: September 30, 2003



Mark J. Rozman
Registration No. 42,117
TROP, PRUNER & HU, P.C.
8554 Katy Freeway, Suite 100
Houston, Texas 77024-1805
(512) 418-9944 [Phone]
(713) 468-8883 [Fax]



21906

PATENT TRADEMARK OFFICE

EXHIBIT A



Merriam- Webster's Collegiate[®] Dictionary

TENTH EDITION

Merriam-Webster, Incorporated
Springfield, Massachusetts, U.S.A.

EXHIBIT A

1066 senior • sensorimotor

standing or rank b: a senior fellow of a college at an English university c: a student in the year preceding graduation from a school of secondary or higher level 3 *cap*: a member of a program of the Girl Scouts for girls in the ninth through twelfth grades in school 4: SENIOR CITIZEN

senior *adj* [ME, fr. L. *senior*, elder, compar. of *senex* old; akin to Goth *sinēis* old, Gk *henos* (14c) 1: of prior birth, establishment, or enrollment — often used to distinguish a father with the same given name as his son 2: higher ranking: SUPERIOR (~ officers) 3: of or relating to seniors (the ~ class) 4: having a claim on corporate assets and income prior to other securities

senior airman *n* (ca. 1977): an enlisted man in the air force who ranks above an airman first class but who has not been made sergeant

senior chief petty officer *n* (ca. 1960): an enlisted man in the navy or coast guard ranking above a chief petty officer and below a master chief petty officer

senior citizen *n* (1938): an elderly person; *esp*: one who has retired

senior high school *n* (1909): a school usu. including grades 10 to 12

seniority *n* [sen-yōr-ē, -yār-ē *n* (15c) 1: the quality or state of being senior 2: a privileged status attained by length of continuous service (as in a company)

senior master sergeant *n* (ca. 1962): a noncommissioned officer in the air force ranking above a master sergeant and below a chief master sergeant

sen-ti [se-na-tē *n*, *pl* *seniti* [Tongan, modif. of E *cent*] (1967) — see *pa'anga* at MONEY table

sen-na [se-na] *n* [NL, fr. Ar *sand*] (1543) 1: any of a genus (*Cassia*) of leguminous herbs, shrubs, and trees native to warm regions; *esp*: one used medicinally 2: the dried leaflets or pods of various sennas (*esp. Cassia acutifolia* and *C. angustifolia*) used as a purgative

sen-net [se-nat] *n* [prob. alter. of obs. *signet* signal] (ca. 1590): a signal call on a trumpet or cornet for entrance or exit on the stage

sen-might *also* *se-n-might* [se-nait] *n* [ME, fr. OE *seofon nihta* seven nights] (15c) *archaic*: the space of seven nights and days 2: WEEK

sen-mif [se-nat] *n* [origin unknown] (ca. 1769) 1: a braided cord or fabric (as of plaited rope yarns) 2: a straw or grass braid for hats

sen-or or **se-fior** [sān-yōr-ē *n*, *pl* *seniors* or *se-fiores* -yōr-ē, -yōr-ē] [Sp *señor*, fr. ML *senior* superior, lord, fr. L. *adj.*, elder] (1622) 1: a Spanish or Spanish-speaking man — used as a title equivalent to *Mr.*

se-no-ra or **se-fio-ra** [sān-yōr-ē, -yōr-ē *n* [Sp *señora*, fem. of *señor*] (1579): a married Spanish or Spanish-speaking woman — used as a title equivalent to *Mrs.*

se-no-ri-ta or **se-fio-ri-ta** [sān-yōr-ē-tā *n* [Sp *señorita*, fr. dim. of *señora*] (1823): an unmarried Spanish or Spanish-speaking girl or woman — used as a title equivalent to *Miss*

sen-ryu [sen-rē-jū] *n*, *pl* *senryu* [Jp] (1938): a 3-line unrhymed Japanese poem structurally similar to haiku but treating human nature usu. in an ironic or satiric vein

sen-sa *pl* of *SENSUM*

sen-sate [sen-sāt] *adj* [ME *sensat*, fr. ML *sensatus*, fr. LL, endowed with sense, fr. L. *sensus* sense] (15c) 1: relating to or apprehending or apprehended through the senses 2: preoccupied with things that can be experienced through a sense modality — *sen-sate-ly* *adv*

sen-sa-tion [sen-sā-shən, -sən-ē *n* [ML *sensatio*, *sensatio*, fr. LL, understanding, idea, fr. L. *sensus*] (1615) 1: a mental process (as seeing, hearing, or smelling) due to immediate bodily stimulation often as distinguished from awareness of the process — compare *PERCEPTION*

sen-sa-tion-able [sen-sā-shən-ə-bəl, -sən-ē-ə-bəl *adj* or *n* — *sen-sa-tion-ally* *adv*

sen-sa-tion-ally *adv* [see *sen-sa-tion*]

sen-sa-tion-ally *adv* [see *sen-sa-tion*]

sen-sa-tion-ally *adv* [see *sen-sa-tion*]

sen-sa-tion-ally *adv* [see *sen-sa-tion*]

sen-sa-tion-ally *adv* [see *sen-sa-tion*]

sen-sa-tion-ally *adv* [see *sen-sa-tion*]

sen-sa-tion-ally *adv* [see *sen-sa-tion*]

sen-sa-tion-ally *adv* [see *sen-sa-tion*]

sen-sa-tion-ally *adv* [see *sen-sa-tion*]

sen-sa-tion-ally *adv* [see *sen-sa-tion*]

sen-sa-tion-ally *adv* [see *sen-sa-tion*]

sen-sa-tion-ally *adv* [see *sen-sa-tion*]

sen-sa-tion-ally *adv* [see *sen-sa-tion*]

sen-sa-tion-ally *adv* [see *sen-sa-tion*]

sen-sa-tion-ally *adv* [see *sen-sa-tion*]

sen-sa-tion-ally *adv* [see *sen-sa-tion*]

sen-sa-tion-ally *adv* [see *sen-sa-tion*]

sen-sa-tion-ally *adv* [see *sen-sa-tion*]

sen-sa-tion-ally *adv* [see *sen-sa-tion*]

sen-sa-tion-ally *adv* [see *sen-sa-tion*]

sen-sa-tion-ally *adv* [see *sen-sa-tion*]

sen-sa-tion-ally *adv* [see *sen-sa-tion*]

sen-sa-tion-ally *adv* [see *sen-sa-tion*]

showing good sense). COMMON SENSE suggests an average degree of such ability without sophistication or special knowledge (*common sense* tells me it's wrong). GUMPTION suggests a readiness to use or apply common sense (if you had the *gumption* of a goat you'd have seen the light by now). JUDGMENT implies sense tempered and refined by experience, training, and maturity (they relied on her *judgment* for guidance). WISDOM implies sense and judgment far above average (a leader of rare *wisdom*).

sense *vi* *sensed*; **sense-ing** (ca. 1531) 1: to perceive by the senses b: to be or become conscious of (~ danger) 2: GRASP, COMPREHEND 3: to detect automatically *esp.* in response to a physical stimulus (as light or movement)

sense-datum *n*, *pl* **sense-data** (1882): an immediate unanalyzable private object of sensation

sense-ful [sen(t)s-ful] *adj* (1591): REASONABLE, JUDICIOUS

sense-less [sen(t)s-las] *adj* (1557): destitute of, deficient in, or contrary to sense: as a: UNCONSCIOUS (knocked ~) b: FOOLISH, STUPID (it was some ~ practical joke — A. Conan Doyle) c: MEANINGLESS

PURPOSELESS (a ~ murder) — **sense-less-ly** *adv* — **sense-less-ness** *n*

sense organ *n* (1854): a bodily structure that receives a stimulus (as heat or sound waves) and is affected in such a manner as to initiate a wave of excitation in associated sensory nerve fibers which convey specific impulses to the central nervous system where they are interpreted as corresponding sensations: RECEPTOR

sen-si-bil-ia [sen(t)s-ibil-ē-ā, -bil-yō *n* *pl* [LL, fr. neut. pl. of L. *sensibilis* sensible] (1856): what may be sensed

sen-si-bil-ity [sen(t)s-ibil-ē-tē *n*, *pl* -ties (15c) 1: ability to receive sensations: SENSITIVENESS (tactile ~) 2: peculiar susceptibility to a pleasurable or painful impression (as from praise or a slight) — often used in pl. 3: awareness of and responsiveness toward something (as emotion in another) 4: refined or excessive sensitiveness in emotion and taste with especial responsiveness to the pathetic

sen-si-bil-ity [sen(t)s-ibil-ē-tē *adj* [ME, fr. MF, fr. L. *sensibilis*, fr. *sensus*, pp. of *sentire* to feel] (14c) 1: of a kind to be felt or perceived: as a: perceptible to the senses or to reason or understanding (felt a chill) (her distress was ~ from her manner) b: *archaic*: perceptibly large: (the ~ world in which we live) (2) of a kind to arouse emotional response (his whispering was a ~ expression of his father's anger) 2: a: capable of receiving sensory impressions (~ to pain) b: receptive to external influences: SENSITIVE (the most ~ reaches of the spirit) 3: a: perceiving through the senses or mind: COGNIZANT (~ of the increasing heat); also: convinced by perceived evidence: SATISFIED (~ of my error) b: emotionally aware and responsive (we are ~ of your problems) c: CONSCIOUS 4: having, containing, or indicative of good sense or reason: RATIONAL, REASONABLE (~ people) (made a ~ answer) *syn* see MATERIAL, PERCEPTIBLE, AWARE, WISE — **sen-si-ble-ness** *n* — **sen-si-bly** *adv*

sen-si-ble *n* (1589): something that can be sensed

sen-si-lum [sen-sil-um] *also* **sen-sil-la** [sen-sil-ā, *pl* -sill-ā, -sill-ā] [NL *sensillum*, dim. of ML *sensus* sense organ, fr. L. *sensus*] (1925): a simple epithelial sense organ of an invertebrate (as an insect) usu. in the form of a spine, plate, rod, cone, or peg that is composed of one or a few cells with a nerve connection

sen-si-ti-sa-tion, **sen-si-tise** *Brit* var of **SENSITIZATION**, **SENSITIZE**

sen-si-tive [sen(t)s-tiv, -tēv] *adj* [ME, fr. MF *sensitif*, fr. ML *sensitivus*, prob. alter. of *sensitivus*, fr. *sensus* sense] (15c) 1: SENSORY 2: 2 a: receptive to sense impressions b: capable of being stimulated or excited by external agents (as light, gravity, or contact) (a photographic emulsion ~ to red light) (~ protoplasm) 3: highly responsive or susceptible: as a (1) easily hurt or damaged; *esp*: easily hurt emotionally (2) delicately aware of the attitudes and feelings of others b: excessively or abnormally susceptible: HYPERSENSITIVE (~ to egg protein) c: readily fluctuating in price or demand (~ commodities) d: capable of indicating minute differences: DELICATE (~ scales) e: readily affected or changed by various agents (as light or mechanical shock) f: highly radiocensitive 4: a: concerned with highly classified government information or involving discretionary authority over important policy matters b: calling for tact, care, or caution in treatment: TOUCHY (a ~ issue like race relations) *syn* see Liable — **sen-si-tive-ly** *adv* — **sen-si-tive-ness** *n*

sensitive *n* (1850) 1: a person having occult or psychical abilities 2: a sensitive person

sensitive plant *n* (1659): any of several mimosaes (*esp. Mimosa pudica*) with leaves that fold or droop when touched; *broadly*: a plant responding to touch with movement

sen-si-tiv-ity [sen(t)s-tiv-ē-tē *n*, *pl* -ties (1803): the quality or state of being sensitive: as a: the capacity of an organism or sense organ to respond to stimulation: IRRITABILITY b: the quality or state of being hypersensitive c: the degree to which a radio receiving set responds to incoming waves d: the capacity of being easily hurt e: awareness of the needs and emotions of others

sen-si-ti-z-a-tion [sen(t)s-ti-zā-shən, -tēz-ā *n* (1887) 1: the action or process of sensitizing 2: the quality or state of being sensitized (as to an antigen)

sen-si-tize [sen(t)s-tiz] *vb* -tized; -tiz-ing [sensitiv + -ize] *v* (ca. 1859): to make sensitive or hypersensitive ~ *vi*: to become sensitive — **sen-si-tiz-er** *n*

sen-si-tom-e-ter [sen(t)s-tō-mā-tēr *n* [ISV *sensitive* + -o- + -meter] (1880): an instrument for measuring sensitivity of photographic material — **sen-si-to-met-ric** [sen(t)s-tō-mē-trik] *adj* — **sen-si-to-met-ry** [sen(t)s-tō-mē-trē *n*

sen-sor [sen-sōr, -sōr] *n* [L *sentire* to perceive + E -or — more at *SENSE*] (ca. 1928): a device that responds to a physical stimulus (as heat, light, sound, pressure, magnetism, or a particular motion) and transmits a resulting impulse (as for measurement or operating a control); *also*: SENSE ORGAN

sen-so-ri-al [sen-sōr-ē-əl, -sōr-ē *adj* (1768): SENSORY — **sen-so-ri-ally** *adv*

sen-so-ri-mo-tor [sen(t)s-rē-mō-tōr, sen(t)s-ā *adj* [sensory + motor] (1855): of, relating to, or functioning in both sensory and motor aspects of bodily activity

sen-so-ri-neu-ral *v* involving the aspect of loss

sen-so-ri-um [sen-sō-ri-um] *n* sense organ, fr. L. *i* concerned with the *broadly*: the entire

sen-so-ry [sen(t)s-ō-ry] *adj* sensation or to the organs to the nerve

sensory area *n* (1) afferent nerve fibers

sen-su-al [sen(t)s-ū-əl] *adj* (15c) 1: i senses or the indulg

sen-su-al-ism [sen(t)s-ū-əl-izm] *n* (1) voted to or preocc

sen-su-al-ist [sen(t)s-ū-əl-ist] *n* (1) c: deficient in mo

sen-su-al-ism [sen(t)s-ū-əl-izm] *n* (1) c: deficient in mo

sen-su-al-ism [sen(t)s-ū-əl-izm] *n* (1) c: deficient in mo

sen-su-al-ism [sen(t)s-ū-əl-izm] *n* (1) c: deficient in mo

sen-su-al-ism [sen(t)s-ū-əl-izm] *n* (1) c: deficient in mo

sen-su-al-ism [sen(t)s-ū-əl-izm] *n* (1) c: deficient in mo

sen-su-al-ism [sen(t)s-ū-əl-izm] *n* (1) c: deficient in mo

sen-su-al-ism [sen(t)s-ū-əl-izm] *n* (1) c: deficient in mo

sen-su-al-ism [sen(t)s-ū-əl-izm] *n* (1) c: deficient in mo

sen-su-al-ism [sen(t)s-ū-əl-izm] *n* (1) c: deficient in mo

sen-su-al-ism [sen(t)s-ū-əl-izm] *n* (1) c: deficient in mo

sen-su-al-ism [sen(t)s-ū-əl-izm] *n* (1) c: deficient in mo

sen-su-al-ism [sen(t)s-ū-əl-izm] *n* (1) c: deficient in mo

sen-su-al-ism [sen(t)s-ū-əl-izm] *n* (1) c: deficient in mo

sen-su-al-ism [sen(t)s-ū-əl-izm] *n* (1) c: deficient in mo

sen-su-al-ism [sen(t)s-ū-əl-izm] *n* (1) c: deficient in mo

sen-su-al-ism [sen(t)s-ū-əl-izm] *n* (1) c: deficient in mo

sen-su-al-ism [sen(t)s-ū-əl-izm] *n* (1) c: deficient in mo

sen-su-al-ism [sen(t)s-ū-əl-izm] *n* (1) c: deficient in mo

sen-su-al-ism [sen(t)s-ū-əl-izm] *n* (1) c: deficient in mo

sen-su-al-ism [sen(t)s-ū-əl-izm] *n* (1) c: deficient in mo

sen-su-al-ism [sen(t)s-ū-əl-izm] *n* (1) c: deficient in mo

sen-su-al-ism [sen(t)s-ū-əl-izm] *n* (1) c: deficient in mo

sen-su-al-ism [sen(t)s-ū-əl-izm] *n* (1) c: deficient in mo

sen-su-al-ism [sen(t)s-ū-əl-izm] *n* (1) c: deficient in mo

sen-su-al-ism [sen(t)s-ū-əl-izm] *n* (1) c: deficient in mo

sen-su-al-ism [sen(t)s-ū-əl-izm] *n* (1) c: deficient in mo

sen-su-al-ism [sen(t)s-ū-əl-izm] *n* (1) c: deficient in mo

sen-su-al-ism [sen(t)s-ū-əl-izm] *n* (1) c: deficient in mo

sen-su-al-ism [sen(t)s-ū-əl-izm] *n* (1) c: deficient in mo

sen-su-al-ism [sen(t)s-ū-əl-izm] *n* (1) c: deficient in mo

sen-su-al-ism [sen(t)s-ū-əl-izm] *n* (1) c: deficient in mo

sen-su-al-ism [sen(t)s-ū-əl-izm] *n* (1) c: deficient in mo

sen-su-al-ism [sen(t)s-ū-əl-izm] *n* (1) c: deficient in mo

sen-su-al-ism [sen(t)s-ū-əl-izm] *n* (1) c: deficient in mo

sen-su-al-ism [sen(t)s-ū-əl-izm] *n* (1) c: deficient in mo

sen-su-al-ism [sen(t)s-ū-əl-izm] *n* (1) c: deficient in mo

sen-su-al-ism [sen(t)s-ū-əl-izm] *n* (1) c: deficient in mo

sen-su-al-ism [sen(t)s-ū-əl-izm] *n* (1) c: deficient in mo

sen-su-al-ism [sen(t)s-ū-əl-izm] *n* (1) c: deficient in mo

sen-su-al-ism [sen(t)s-ū-əl-izm] *n* (1) c: deficient in mo

sen-su-al-ism [sen(t)s-ū-əl-izm] *n* (1) c: deficient in mo

sen-su-al-ism [sen(t)s-ū-əl-izm] *n* (1) c: deficient in mo